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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,477	07/20/2001	Andrew S. Wright	DATUMTE.008A	1633
20995	7590	12/28/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			TRAN, KHANH C	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			2631	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b> <span style="float: right;">at</span>	
	09/910,477	WRIGHT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Khanh Tran	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-23 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 10-14, 17-23 and 28-34 is/are allowed.
- 6) ☒ Claim(s) 16, 25-27 and 35 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. The Amendment filed on 10/04/2005 has been entered. Claims 1-7, 10-23 and 25-35 are pending in this Office action.

### ***Response to Arguments***

2. Applicant's arguments with respect to claim 25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

3. Claim 15 is objected to because of the following informalities: in line 8, the FIR should be changed to -- an FIR --. Appropriate correction is required.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 16 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 22 of copending Application No. 09/910,422. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 22 of copending Application No. '422' discloses all the claimed steps in which the digital waveshaping circuit of the instant application can perform, therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made that the digital waveshaping circuit of the instant application can be used to performed all the claimed steps of the copending Application No. '422', in which the copending Application No. '422' can be implemented to include an apparatus similar to the claimed digital waveshaping circuit to perform all the steps in the copending Application No. '422'.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: there is no step of using the receiving reference information as a control input to update first parameter according to the original disclosure (see also figure 5 of the original disclosure).

6. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: there is no step of using the receiving reference information to update first parameter according to the original disclosure (see also figure 5 of the original disclosure).

7. Claim 25 is rejected on the same ground as for claim 26 because of dependency.

8. Claim 35 is rejected on the same ground as for claim 27 because of dependency.

***Allowable Subject Matter***

9. Claims 26-27 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. Claims 25 and 35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 1-7 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, claim 1 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a waveshaping circuit that shapes a first waveform to decrease a ratio of peak power to average power in the first waveform such that an available power of a radio frequency power amplifier can be efficiently used, the waveshaping circuit comprises “a preconditioning circuit adapted to receive an input symbol stream, a pulse generator adapted to receive the upconverted signal and to receive phase information from the digital numerically controlled oscillator, configured as set forth in the application claim”.

12. Claims 10-15 are allowed.

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The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 10, claim 10 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a preconditioning circuit adapted to reduce an amplitude of a signal peak in an input symbol stream in real time, the preconditioning circuit comprises "elements configured as set forth in the application claim".

13. Claims 17-23 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 17, claim 17 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a method of shaping a first waveform to decrease a ratio of peak power to average power in the first waveform by digitally modifying data in a data stream that gives rise to the first waveform, the method comprising "the steps performing tasks as set forth in the application claim". It is noted the closest prior art, Thomson (US 6,130,916), discloses a method and apparatus for improving a transmission data rate of baseband data in a wireless network. However, Thomson (US 6,130,916) fails to anticipate or render the above underlined limitations obvious.

14. Claims 28-34 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 28, claim 28 is allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a method of digitally preconditioning an input symbol stream to a pulse shaping filter in real time, the method comprising "the steps performing tasks as set forth in the application claim".

### ***Conclusion***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Tran whose telephone number is 571-272-3007. The examiner can normally be reached on Monday - Friday from 08:00 AM - 05:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KCT

Pham Cong Tran

12/22/2005

Examiner KHANH TRAN